

ABSTRACT OF THE DISCLOSURE

A human urocortin-related peptide with significant sequence homology to the CRF neuropeptide family was identified.

5 A mouse cDNA was isolated from whole brain poly (A+) RNA that encodes a predicted 38 amino acid peptide protein designated herein as urocortin II. Both human URP and mouse Ucn II are structurally related to the other known mammalian family members, CRF and urocortin (Ucn). These peptides are involved in
10 the regulation of the hypothalamic-pituitary-adrenal axis under basal and stress conditions, suggesting a similar role for URP and Ucn II. Synthesized Ucn-II and URP peptide binds with higher affinity to CRF-R2 than to CRF-R1 Ucn II and human URP appear to be involved in the regulation of body temperature and appetite and
15 may play a role in other stress related phenomenon. These findings identify Ucn II and human URP as a new members of the CRF family of neuropeptides, which are expressed centrally and bind to CRF-R2.